AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior listings of claims in the application:

LISTING OF CLAIMS:

- 1-54. (Canceled).
- 55. (New) A nucleic acid fragment that encodes a polypeptide that comprises the amino acid sequence set forth in SEQ ID NO: 2, residues 17-677.
- 56. (New) The nucleic acid fragment according to claim 55, which is a DNA fragment.
 - 57. (New) A vector carrying the nucleic acid fragment according to claim 56.
- 58. (New) The vector according to claim 57, which is capable of autonomous replication.
- 59. (New) The vector according to claim 58 being selected from the group consisting of a plasmid, a phage, a cosmid, and a virus.
 - 60. (New) The vector according to claim 57, which is an expression vector.
- 61. (New) The vector according to claim 60, comprising in the $5' \rightarrow 3'$ direction and in operable linkage, a promoter for driving expression of the nucleic acid fragment, a nucleic acid sequence encoding a leader peptide enabling secretion of or integration into the membrane of the encoded polypeptide, and the nucleic acid fragment.
 - 62. (New) A transformed host cell carrying the vector of claim 57.
 - 63. (New) A transformed host cell carrying the vector of claim 60.
 - 64. (New) A stable cell line which carries the vector according to claim 60.
 - 65. (New) An immunogenic composition for immunizing against HER-2

protein in a human comprising the vector according to claim 60 in admixture with a pharmaceutically acceptable carrier or vehicle and optionally an adjuvant.

66. (New) A nucleic acid fragment that encodes a polypeptide that consists of the amino acid sequence set forth in SEQ ID NO: 2, residues 17-677.